Executive Summary

What is the SR 502 Corridor Widening Project?

The SR 502 Corridor Widening Project proposes to add lanes and make safety and capacity improvements, including the addition of traffic signals and a median treatment, to SR 502 (NE 219th Street) in north Clark County, Washington. The segment to be improved extends five miles between NE 15th Avenue and NE 102nd Avenue (Exhibit ES-1). With the recent completion of the I-5/SR 502 Interchange, SR 502 will serve as one of two primary access routes (along with SR 503) from Battle Ground, Washington to the regional highway system and the Portland–Vancouver metropolitan area.

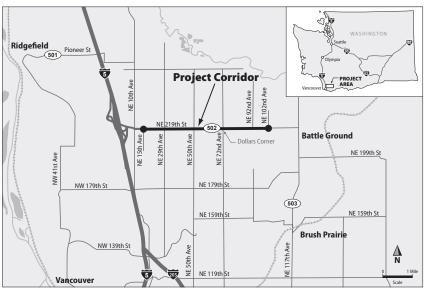


Exhibit ES-1: Project corridor vicinity map

The purpose of the project is to improve mobility and safety along the SR 502 corridor between NE 15th Avenue and NE 102nd Avenue and improve regional connectivity between Battle Ground, north Clark County, and I-5. Increasing congestion and collision rates on SR 502 are driving the need for the project. Population growth in Battle Ground and the surrounding areas is expected to substantially increase traffic using the corridor in the future.

Who is leading the SR 502 project?

The Federal Highway Administration and the Washington State Department of Transportation are the lead agencies for this project. As the lead agencies, they oversee the environmental review process and coordinate input from 18 federal, tribal, state, regional and local partners as well as the public.

HOW CAN I FIND OUT MORE?

Learn more about the project and view the draft environmental impact statement by visiting the project website at:

www.wsdot.wa.gov/Projects/SR502/Widening

Comments on the project can be sent to:

Chris Tams

Washington State Department of Transportation Southwest Region PO Box 1709 Vancouver, WA 98668-1709

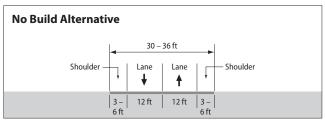
or

Dean Moberg

Federal Highway Administration 711 S. Capitol Way, Suite 501 Olympia, WA 98501 All comments must be submitted by July 20, 2009.

What alternatives are being considered?

The draft environmental impact statement evaluates a No Build Alternative as well as one Build Alternative, which is the preliminary preferred alternative (Exhibit ES-2). The Build Alternative was developed by combining aspects of a number of earlier concepts considered during an initial screening process.



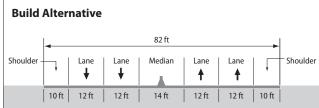


Exhibit ES-2: Comparison of a typical cross section of SR 502 under the No Build and Build Alternatives

No Build Alternative

Under the No Build Alternative there would be no improvements to SR 502. This alternative would retain the existing facility along with programmed and funded projects elsewhere in the study area.

While the No Build Alternative would not address the congestion and safety issues identified on the SR 502 corridor, it does provide a basis of comparison for the beneficial and adverse effects associated with the Build Alternative.

Build Alternative (Preliminary Preferred Alternative)

The Build Alternative would improve SR 502 from just west of NE 15th Avenue to NE 102nd Avenue (Exhibit ES-3). Along this entire segment, the roadway would be widened to provide two lanes in each direction with a median treatment, such as a median barrier or curb, separating westbound and eastbound travel. New signals and turn pockets would be added at the intersections at NE 29th Avenue, NE 50th Avenue, NE 92nd Avenue, and the existing signalized intersection at NE 72nd Avenue (Dollars Corner) would be improved and expanded. Directional median openings would be provided in two locations to allow left-turns from SR 502 onto side streets, including an opening at NE 67th Avenue and one located between NE 79th Avenue and NE 82nd Avenue. Driveway connections to SR 502 would be consolidated, reducing the number of access points compared to today. Turns to and from SR 502 would be restricted to right-in/right-out turning movements at all driveways and non-signalized intersections along the corridor, except where directional median openings are provided.

$\overline{2}$) DEFINITION

WHAT IS A STUDY AREA?

A study area is the area in which impacts from the project may occur.

Although this term is used generally in the draft environmental impact statement, the study area varies by resource, and is defined for each resource in the discipline reports included in the appendices.

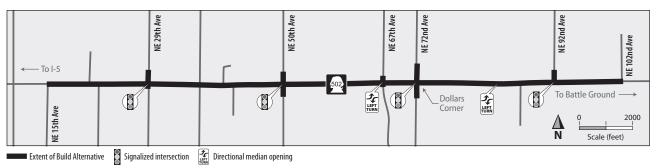


Exhibit ES-3: Extent of Build Alternative

Paved shoulders that could be used by pedestrians and bicyclists would be constructed along both sides of SR 502 for the entire corridor, while bicycle lanes and sidewalks would be provided in the vicinity of Dollars Corner. Crosswalks would be installed at all signalized intersections.

How would the project improve transportation mobility and safety?

SR 502 is one of two primary routes providing access to the City of Battle Ground and surrounding areas. Today, the project corridor is a heavily traveled, two-lane roadway (one lane in each direction) with narrow shoulders. By the year 2033, traffic volumes on SR 502 are projected to nearly triple, leading to heavily congested conditions during the morning and evening peak traffic periods (Exhibit ES-4).

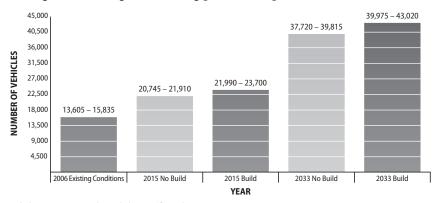


Exhibit ES-4: Typical weekday traffic volumes on SR 502

Without improvements, congestion would increase and degrade the facility substantially in the future. By 2033, all SR 502 project corridor intersections are expected to experience severe congestion during both the morning and evening peak hours.

The Build Alternative would reduce congestion on the corridor considerably relative to the No Build.

Improved traffic conditions under the Build Alternative are further highlighted through comparison of expected travel speeds. During the morning and evening peak hours, travel speeds under the Build

WHY WERE 2015 AND 2033 SELECTED AS ANALYSIS YEARS?

If the Build Alternative is built, construction would begin in the year 2012 and is expected to be completed and open to traffic by 2015. The near-term traffic analysis therefore reflects conditions that would be expected shortly after the project opens. Federal and state environmental guidelines, as well as the Washington State Department of Transportation Design Manual, call for a longer-term analysis of conditions at least 20 years past the expected start of construction. Construction was initially expected to begin in 2013, so 2033 was selected as the long-term analysis year, which is still at least 20 years past the

current start of construction in 2012.

(a) DEFINITION

WHAT IS A HIGH ACCIDENT CORRIDOR?

High Accident Corridors are sections of state highway one or more miles long, with a higher than average number of severe accidents over a continuous period of time. The state average accident rate for corridors similar to SR 502 ranges from 1.11 collisions per million vehicle miles traveled each year for Rural Principal Arterials to 2.56 for Urban Principal Arterials. SR 502 exhibits characteristics of both types of facilities.

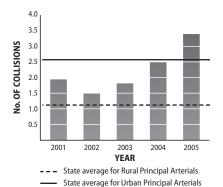


Exhibit ES-5: Number of collisions per million vehicle miles traveled on SR 502, 2001–2005

Alternative would maintain average speeds in excess of 28 miles per hour through 2033. In contrast, travel speeds under the No Build Alternative are expected to fall to 9–13 miles per hour by 2033.

Beyond improving traffic, a primary objective of the SR 502 Corridor Widening Project is to improve safety on the project corridor. SR 502 between NE 37th Avenue and just east of NE 50th Avenue was designated as a High Accident Corridor by the Washington State Department of Transportation for 2007 through 2009. The segments of SR 502 between NE 10th Avenue and NE 29th Avenue and between NE 50th Avenue and NE 84th Avenue were also designated as High Accident Corridors in the past. Collision rates have increased sharply in recent years (Exhibit ES-5), and continuing growth in traffic is expected to increase collision rates further if safety improvements are not made.

Access on SR 502 is largely uncontrolled today, which in turn contributes to increased congestion and reduced safety. Most adjacent properties have driveway connections to the highway, and vehicles may enter or exit these driveways traveling in either direction. The safety of left-turns at driveway connections is especially of concern because these turns involve crossing in front of oncoming traffic, and in the case of left-turns from the highway to a driveway, also require the turning vehicle to stop in the travel lane to wait for a suitable gap in oncoming traffic. With approximately 150 driveway connections on the project corridor, these turns are unpredictable and pose a risk for rear-end collisions. In addition, the corridor has narrow shoulders and only a few short sidewalk segments, which provide little refuge for pedestrians or bicyclists.

The Build Alternative includes many changes specifically designed to address these safety and mobility issues:

- A median treatment would be provided along the center of the roadway to improve safety. A median treatment would substantially reduce the potential for head-on and angle collisions as well as eliminate left-turning movements into and out of driveways
- The intersections of NE 29th Avenue, NE 50th Avenue, NE 72nd Avenue, and NE 92nd Avenue would be signalized, allowing controlled access onto the corridor for cross-street traffic at these locations
- Two directional median openings would be provided to allow left-turns from SR 502 at NE 67th Avenue and between NE 79th Avenue and NE 82nd Avenue.
- Other intersections would be restricted to right-turns only, with u-turns allowed at signalized intersections to allow drivers to reverse direction
- Turn pockets would be included to separate turning vehicles from through travel at the signalized intersections

- The number of travel lanes would be increased to two in each direction, providing a safer means of passing slower moving traffic
- Widened shoulders along the entire project corridor would create more space for bicyclists and pedestrians
- Improved sidewalks would be constructed in the Dollars Corner area, and signalized intersections would provide a safer means for pedestrians to cross the street. Sidewalks would not be built at locations outside of Dollars Corner, but pedestrians would be able to use widened shoulders on these segments.

What beneficial and adverse effects would the project alternatives have on the environment and community?

In addition to the beneficial effects on transportation and safety noted above, the changes associated with the Build Alternative would have other long-term beneficial and adverse effects on the community and environment. The beneficial and adverse effects of both alternatives are summarized in Exhibit ES-6 along with potential mitigation measures that would be incorporated into the Build Alternative to limit adverse effects.

Exhibit ES-6: Summary of long-term environmental and community effects

	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE	
	Long-term beneficial and adverse effects	Long-term beneficial and adverse effects	Potential mitigation measures
Surface water	Stormwater from SR 502 would remain untreated and continue to discharge as it does under existing conditions	Create approximately 28 acres of new impervious surfaces (in addition to 23 acres of existing impervious surfaces) Provide enhanced water quality treatment of stormwater runoff from all of the new impervious surfaces (28 acres) and about 6 acres of the currently untreated existing impervious surfaces	Effects mitigated by stormwater treatment included in the Build Alternative design
Biological resources (vegetation, fish, and wildlife)	No new direct effects to vegetation and habitat resources	 Convert 54–60 acres of grassland, scrub, forest and riparian land to roadway or related facilities due to the acquisition of strips of land along SR 502 frontage Disturb 2–3 acres of potential fish habitat for threatened or endangered species. Less than 0.1 acre is designated critical habitat Loss and fragmentation of wildlife habitat 	Replant disturbed areas with native vegetation Restore in-stream habitat at mitigation sites and restoration of riparian buffer at Dollars Corner
		 Loss and fragmentation of whome habitat Loss of infiltration area due to increased impervious surfaces Potential for fish handling and mortality 	
Wetlands	No new wetland fills	• Fill 8—12 acres of wetlands	Create new wetlands, and restore and enhance degraded wetlands to a higher level of function

	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE	
	Long-term beneficial and adverse effects	Long-term beneficial and adverse effects	Potential mitigation measures
Floodplains	No changes in the floodplain or the flood storage capacity of the Mill Creek floodway No existing culverts replaced	• Fill minor amounts of floodplain storage	Replace and extend culverts to reestablish floodplain connectivity and potentially increase flood storage capacity along Mill Creek
Groundwater	Stormwater from SR 502 remains untreated No changes to the quality of groundwater expected	Stormwater runoff would be treated No effects expected	No mitigation required as no effects are expected
Geology and soils	No soils disturbed	Construction of some roadway segments may occur on peat-laden soils that are subject to excessive settlement	Conduct geotechnical evaluations to identify specific soils susceptible to excessive settlement and use appropriate Washington State Department of Transportation design manual construction techniques
Farmlands	No land currently or recently used for farming or designated as prime farmland converted to non-agricultural uses	 Convert 12–16 acres of prime farmland soils to roadway and stormwater facilities Convert 63 acres of prime farmland soils to wetland mitigation at the Mill Creek North potential mitigation site Convert 22 acres of prime farmland soils to wetland mitigation at Sunset Oaks 	Minimize conversion of prime farmland soils to the extent possible
Land use	No changes to existing land uses	 Investigate 140—160 parcels for full or partial acquisition Convert 40—60 acres (55% single family residential and agriculture, 13% agriculture, 11% single family residential, 9% commercial, 6% vacant, 6% other uses) to roadway, stormwater facilities or wetland mitigation Convert 68 acres of single family residential and agriculture land to wetland mitigation at the Mill Creek North potential mitigation site 	Implement the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, as well as the Washington State Relocation Assistance — Real Property Acquisition Policy
Residential and business displacements	No residences or businesses displaced	Displace approximately 16–22 businesses and 20–30 residences	• Implement the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, as well as the Washington State Relocation Assistance — Real Property Acquisition Policy
Economy	Increased congestion may make access to businesses increasingly difficult and reduce pedestrian activity at Dollars Corner, potentially reducing business activity	 Displace 85–115 employees Loss of 15–25 parking spaces at businesses due to right of way acquisition Improved regional access, benefitting businesses that serve the larger region Improved pedestrian access at Dollars Corner 	Implement the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, as well as the Washington State Relocation Assistance — Real Property Acquisition Policy

	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE	
	Long-term beneficial and adverse effects	Long-term beneficial and adverse effects	Potential mitigation measures
Historic and archaeological resources including Section 4(f) property	No historic or archaeological resources affected	 Adversely affect three historically significant properties (resulting in a "use" of these Section 4(f) properties) No archaeological resources affected 	Design and implement mitigation that is approved by the Washington State Department of Archaeology and Historic Preservation
Parks, recreation and open space	No parks, special use areas, designated open space, or other types of designated public lands exist within the study area	No parks, special use areas, designated open space, or other types of designated public lands exist within the study area	No mitigation required as no parks, special use areas, open space or other public lands are affected
Neighborhoods	Increased traffic volumes and associated congestion on SR 502 could affect community facilities and public services (such as delaying response times for emergency services), travel patterns, and public safety No substantial change to community cohesion	Adversely affect community cohesion by displacing a substantial number of residences and businesses Modify travel routes due to addition of median treatment (i.e. — require u-turns instead of left-turns) Improve community safety and mobility, including travel for bicyclists and pedestrians Reduced travel time for police, fire, and emergency medical vehicles	Implement the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, as well as the Washington State Relocation Assistance — Real Property Acquisition Policy
Minority, low- income, elderly, and disabled populations	No disproportionate adverse effects on minority, low-income, elderly or disabled population groups in the study area	Relocate one social service agency that serves minority and low-income populations No disproportionate adverse effects on minority, low-income, elderly, or disabled population groups in the study area	Provide relocation assistance to assist the social service agency to find a place to relocate in the community, if they so choose
Visual quality and views	Increase long-term visual distraction, light, and glare from increased vehicle congestion	Increase the visual dominance and bisecting effect from the expanded highway	Blend disturbed areas with the surrounding landscape
Plan consistency	Inconsistent with goals and objectives of local agency plans	Support goals and policies of local agency plans; no inconsistencies identified	No mitigation needed due to consistency with plans
Noise	 Increased congestion increases sound levels by 0–5 decibels Affect 34 residences and one church by increased traffic noise 	Widened roadway and traffic increases sound levels by 1—11 decibels Affect 70 residential sites (excluding those displaced or relocated) and 3 churches by increased traffic noise	A thorough analysis for potential mitigation measures (i.e. noise walls) was conducted. However, none of these measures were found to be feasible or reasonable, as they did not meet Federal Highway Administration abatement criteria
Hazardous materials	Potential hazardous materials sites not disturbed	Disturb four sites known to contain hazardous materials (primarily petroleum, solvents and metals) Possibly affect six other potential contamination sites	Prepare and implement an emergency response plan for hazardous material spills occurring during the operation of the highway
Public utilities	No long-term effects on utilities	 Construct some new utilities and relocate or modify others No effect on major electric or gas transmission lines in the corridor Modify or reconfigure a number of private drinking wells and septic systems 	No mitigation necessary as no adverse utility effects are expected

	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE	
	Long-term beneficial and adverse effects	Long-term beneficial and adverse effects	Potential mitigation measures
Air quality	 No violations of applicable National Ambient Air Quality Standards Future carbon monoxide levels similar to existing conditions 	No violations of applicable National Ambient Air Quality Standards Carbon monoxide levels similar to existing conditions	No mitigation necessary as no significant adverse air quality effects are expected
Energy	• Fuel consumption for vehicles using SR 502 expected to double by 2033 due to increasing traffic and congestion	• Fuel consumption for vehicles using SR 502 expected to double by 2033 due to increasing vehicle miles of travel	No mitigation necessary as no adverse energy effects are expected
Climate change	Morning peak period expected to consume 770 gallons of fuel, generating 15,000 pounds of carbon dioxide	Morning peak period expected to consume 830 gallons of fuel, generating 16,000 pounds of carbon dioxide	No mitigation necessary as no adverse climate change effects are expected
	Evening peak period expected to consume 1,100 gallons of fuel, generating 21,000 pounds of carbon dioxide	Evening peak period expected to consume 1,000 gallons of fuel, generating 20,000 pounds of carbon dioxide	



WHAT ARE TEMPORARY EFFECTS?

Temporary effects are short-term beneficial and adverse effects that occur during the construction of a project, but which are not permanent effects of the project.

How would the project be constructed?

Construction of SR 502 under the Build Alternative is expected to begin in 2012 and last for about three years. Washington State Department of Transportation and the contractor would develop traffic control plans to allow necessary construction activities to take place in an efficient manner while effectively meeting the travel needs of SR 502 users.

Construction of the Build Alternative would involve a range of activities, most of which would occur on and adjacent to the current roadway alignment. Construction activities would affect traffic using SR 502, and also have temporary, or short-term, effects on the community and environment. The duration of construction is expected to be three years.

Typical work activities would include grading, construction of stormwater facilities, and paving, with construction occurring in multiple locations at the same time. Construction staging would most likely occur on parcels acquired for right of way along the corridor.

The No Build Alternative would retain the existing facility, and no improvements would be constructed.

What effects would occur during construction of the project?

Exhibit ES-7 summarizes temporary effects that are expected during construction of the Build Alternative and potential mitigation measures to limit these effects. The No Build Alternative would not have any temporary effects, as no construction would take place.

Exhibit ES-7: Summary of temporary effects during construction of the Build Alternative

	Temporary effects during construction	Potential construction mitigation measures
Surface water and wetlands	Temporarily affect stream habitats and wetlands by vegetation removal, increased surface runoff, erosion and sedimentation of exposed soils, and potential for spills	Implement a temporary erosion and sediment control plan to minimize erosion and prevent sediment from entering streams and wetlands Implement a spill prevention control and countermeasures plan to ensure all harmful materials are properly stored, contained and disposed
Biological resources (vegetation, fish, and wildlife)	Temporarily affect upland and riparian habitats by clearing, erosion, increased surface water runoff, light and noise. Potential dewatering of work areas below the ordinary high water mark	Locate staging areas above the ordinary high water mark and outside environmentally sensitive areas. Staging and temporary access areas would occur on existing roadways where possible (see sections on views and noise for light and noise mitigation) Conduct culvert replacement, channel realignment/restoration activities and wetland mitigation construction during the established in-water work window and in full compliance with all permits
Floodplains	Potential minor redirection and/or obstruction of the flow of runoff or floodwaters by grading	No mitigation necessary, as effects would be minor and temporary
Groundwater	Temporarily impede rainfall infiltration by soil compaction and other construction activities Potentially affect the shallow aquifer with hazardous materials spills	Implement a spill prevention control and countermeasures plan to avoid and minimize effects from spills
Geology and soils	Potentially erode exposed soils during construction Create dust from windborne erosion	Implement a temporary erosion and sedimentation control plan See section on air quality for dust mitigation
Farmlands and Land Use	Temporarily expose residents, crops, and livestock close to SR 502 to increased noise, dust, light and glare, construction vehicle traffic, modifications to access, and increased travel times and congestion Land uses may be temporarily affected due to congestion and changed access, but construction would not preclude existing land uses	Provide notice of upcoming traffic impacts, access changes, or utility disruptions to residents and businesses
Residential and business displacements	No temporary displacements	No mitigation required as no temporary displacements anticipated
Economy and neighborhoods	Temporarily expose residents and businesses close to SR 502 to increased noise, dust, light and glare, construction vehicle traffic, modifications to access, and increased travel times and congestion Provide new jobs for construction workers in the region Create demand for construction supplies and materials, which local businesses may be able to supply Provide increased local business from construction workers	Maintain one lane of travel in each direction and allow reasonable access to all properties during construction (see sections on noise, air quality and views for noise, dust and glare mitigation)
Historic and archaeological resources including Section 4(f) property	Temporarily affect six historic properties with dust, noise and vibration	Develop and implement an inadvertent discovery plan

	Temporary effects during construction	Potential construction mitigation measures
Parks, recreation and open space	No publicly owned parklands would be affected during construction	No mitigation necessary as no public lands would be affected
Minority, low- income, elderly, and disabled populations	Effects on minority, low-income, elderly, and disabled populations and businesses that serve them would not be disproportionate	No additional mitigation as effects would not be disproportionate
Visual quality and views	Create temporary visual effects due to construction equipment, materials, and work activities Create glare from construction lights	Focus and/or shield construction lighting to limit spillover effects and reduce glare
Noise	Temporarily create higher sound levels from operation of construction equipment	Limit nighttime construction activities Maintain construction equipment engines and mufflers to reduce noise
Hazardous materials	Potentially release contaminants such as asbestos, lead, petroleum products and solvents into soils, air and water during earthmoving and other construction activities Potentially release contaminants from electrical transformers present in the study area	Conduct site assessment for all acquired properties and structures to determine presence of hazardous materials Follow proper procedures for removal of asbestos, lead and other contaminants if found in structures to be demolished Monitor soil conditions during grading and remediate as necessary
Public utilities	Perform minor temporary utility relocations during construction to provide continuous service and access for repair and maintenance	Provide advance notice of any utility service interruptions
Air quality	Temporarily increase dust and fine particulates Temporarily increase local emissions from construction equipment	Use best management practices to minimize production of dust, particulates, and emission of exhaust gases
Energy	Consume an estimated 581—743 million BTUs to move materials and construct the project	Implement traffic control plan to limit traffic delays
Climate change	• Temporarily increase local emission of greenhouse gases from construction equipment	Use Best Management Practices to minimize emission of exhaust gases